

REMARKS

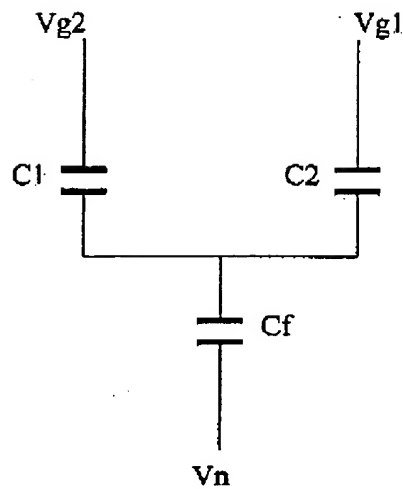
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Claims 1-19 and 31-40 are pending in this application. Claims 20-30 were previously canceled. Rejection of Claims 1-19 and 31-40 has been traversed herein. In view of the following remarks, Applicant respectfully requests reconsideration of the claims.

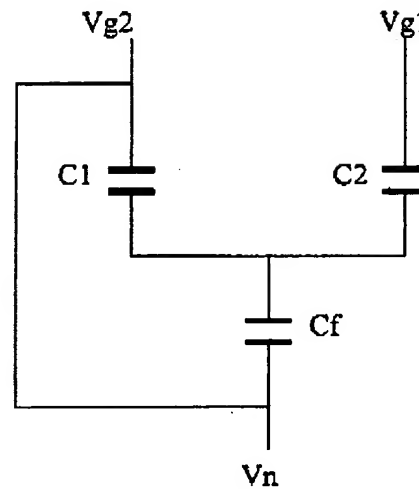
Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Adan (U.S. Pub. 2003/0136992) in view of Yeo et al. (U.S. Patent 6,521,939). Claim 1 relates to forming a varactor and recites "forming first, second and third N+ regions in the same N well."

The Examiner has conceded that Adan does not teach forming all the N+ doped regions in the same N well. Examiner has asserted that it would have been obvious to one of ordinary skill in the art at the time of invention was made to combine the teaching of Adan and Yeo to enable the process of forming the first, second and third N+ doped regions in the same N well of Adan to be performed and furthermore to obtain a high performance varactor on silicon in the manufacture of integrated circuit devices.

Assuming for the sake of argument, one would be motivated to combine Adan and Yeo. The resulting structure would be non-operative. Note that, when the first, second and third N+ doped regions of Adan are formed in the same N well, The schematic block diagram of the varactor would be as illustrated herein.



(Adan)



(Adan in view of Yeo)

It is obvious to those skilled in the art that the process of forming the first, second and third N+ doped regions in the same N well of Adan would cause the shorting of control terminal (Vg2) and control terminal (Vn). The shorting of control terminal (Vg2) and control terminal (Vn) destroys the intended purpose of Adan as a multi-terminal MOS capacitor (page 2, paragraph [0033] and page3, paragraph [0051]).

The following is a quotation of MPEP (page 2100-131, Rev 2. May 2004) which forms the basis of traverse to examiner's rejection:

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

In view of the above, Applicant respectfully traverses the rejection on Claim 1. For at least the reason discussed above, Claim 1 is patentable over Adan (U.S. Pub. 2003/0136992) in view of Yeo et al. (U.S. Patent 6,521,939). Claims 2, 3, 4, 9, 12, 14, 15, 18 and 19 are also allowable over the art by virtue of their dependence from Claim 1 as well as their respective further defining limitations.

Applicant also respectfully traverses the rejection on Claims 31, 35 and 40. Claim 31 recites "forming first, second and third N+ doped regions in an N well." Because Claim 31 recites all doped regions are formed in an (one) N well, the claim is patentably distinct over Adan in view of Yeo for the same reasons provided above with respect to claim 1 (i.e., the combination of Adan and Yeo would be non-operative). Claims 32, 33 and 34 are also allowable over the art by virtue of their dependence from Claim 31 as well as their respective further defining limitations. Claim 35 recites "forming first, second and third N+ doped regions in an N well." Because Claim 35 recites all doped regions are formed in an (one) N well, the claim is patentably distinct over Adan in view of Yeo for the same reasons provided above with respect to Claim 31 (i.e., the combination of Adan and Yeo would be non-operative). Claims 36 and 37 are also allowable over the art by virtue of their dependence from Claim 35 as well as their respective further defining limitations. Claim 40 recites "forming first, second and third N+ doped regions in the same N well." the claim is patentably distinct over Adan in view of Yeo for the same reasons provided above with respect to claim 1 (i.e., the combination of Adan and Yeo would be non-operative).

In view of the above, Applicant respectfully submits that the application is in condition for allowance and requests that the Examiner pass the case to issuance. If the Examiner should have any questions, Applicant requests that the Examiner contact Applicant's agent at 972-732-1001 so that such issues may be resolved as expeditiously as possible. No fee is believed due in connection with this filing. However, should one be deemed due, the Commissioner is hereby authorized to charge the appropriate fees to Deposit Account No. 50-1065.

Respectfully submitted,

Oct. 18, 2006

Date

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